National Strategic Intelligence and Competitive Intelligence: How a Comparative View and Mutual Learning Can Help Each ?

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Abstract

National strategic intelligence and competitive intelligence seem to be two different disciplines. So far, research has focused on these two fields, national intelligence and competitive intelligence separately, without any attempt to benchmark from one field to the other. However, these two fields have a lot in common. In both government and competitive intelligence, intelligence inputs are embedding in the process of decision support system. One of the options emerging from comparing intelligence performance in both fields is the possibility to use accumulated experience in the business field to improve intelligence practice in national security context and vice versa through mutual learning. One particularly interesting aspect is the comparison between intelligence failures in both areas and how they can be prevented and whether any of these fields can be learned from the experience of other to improve performance.

***Keywords*:** national intelligence, strategic intelligence, national security, competitive intelligence, market intelligence, intelligence failures.

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Introduction[ii]

Significant strategic surprises are common both in the political-security sphere and in the business space. The Arab Spring (2011) in Egypt, Tunis, Yemen and Syria against the governments and rulers of these countries, demonstrated the far-reaching consequences of the strategic surprise in the security field. As for the competitive private sector, the strategic surprises of Nokia, the "world's mobile communications leader" with the arrival of Apple's iPhone (2007), and the blow of Kodak as a result of the company missing the digital revolution, led to their collapse. It is only natural that those planning a strategic move do all they can to bring it to surprise, while those who are charged with thwarting the opponent's strategic moves try their best to prevent surprise (Barnea, 2015).

According to the Strategic and Competitive Intelligence Professionals Association – SCIP (http://www.scip.org/), competitive intelligence is the process of legally and ethically gathering and analyzing information about competitors and the industries in which they operate in order to help the organization make better decisions and reach its goals. Competitive intelligence was introduced and became institutionalized in the 1980s, and more so since the second half of the 1990s. It was strongly influenced by studying the relevant experience acquired from government intelligence together with outstanding inputs from the business sector (Walle, 2001). One of the factors that drove the progress of intelligence in business forward was Michael Porter's pioneering book "Competitive Strategy" (Porter, 1980), which was one of the most influential works in the field of business strategy. While the information revolution became significant in business since the end of 1990's, the dynamic changes in the competitive environment transformed competition globally, and have pushed forward a comprehensive research and academic study in competitive and marketing intelligence, (Prescott, 1999; Tianjiao Qui. 2008; Vedder and Guynes, 2000; Dishman and Calof, 2008; Wright and Calof, 2006).

Although national strategic intelligence and competitive intelligence appear to be two unrelated fields, the ways in which challenges are addressed in each field are rather similar: they are largely depended on early-warning capabilities (Miscik, 2017; Gilad, 2004; Grabo, 2004); decision-makers having a close interface with intelligence expect to learn about threats and opportunities in advance. In this context, it is not surprising that in recent years, academic research in national, competitive and marketing intelligence has demonstrated that it is possible to perform a comparative analysis of the two fields (government and business) and identify possible parallels between them.

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ii This article is an extended version of a paper that the author has previously published on the website of the Strategic and Competitive Intelligence Professionals Association – SCIP. The content of the paper was made available for limited dissemination in the online Competitive Intelligence Magazine, Vol. 16, No. 3, July - September, 2013.

One particularly interesting aim of this article is to compare historical intelligence failures in both areas and investigate if they could have been prevented and whether or not any of these fields can learn from the experience of each other to improve performance. The core argument in this paper is that in both intelligence fields, government and business, it is the intelligence product supporting the decision-making process that addresses and deals with changes in the external environment determined by existential threats to national security or business competitors. Consequently, both fields have room for improvement that could be achieved through a cross-functioning study. Nevertheless, although both judgments and choices are subject to common biases in the processing of information, which may lead to further errors made by decision-makers, this issue seems to be better researched in the business sector than in governmental organizations. (Sage, 1990; Kahneman and Tversky, 1984; Busenitz and Barney, 1997).

This qualitative research is based on a review of the existing literature on both competitive intelligence and government (strategic) intelligence. Building upon his findings, the author will then present which and how best practices can be applied to each field of intelligence. In addition, the purpose of this study is to show that mutual learning from each field can improve the quality and capacity of intelligence products to understand and address complex situations and support more effectively the decision-making process.

Similarities between government and competitive intelligence

A visible similarity between both government intelligence and competitive intelligence is that they both function based on the "intelligence cycle" (Johnston and Johnston, 2007; Omand, 2010). This is a systematic process of five steps ensuring that intelligence activities carry out under checks and balances. The intelligence cycle is a closed loop; feedback has to be received from decision-makers and revised intelligence requirements need to be issued to make sure that the intelligence product is fulfilling their needs.

However, navigating deeper into the subject, it appears that similarities between intelligence failures experienced in government and in the business field represent five major areas (Barnea, 2015):

1. Gathering ability: usually there is no shortage in information as these capabilities have developed considerably in recent years.
2. Noisy information environment: there are struggles with receiving and classifying information, even prior to the analysis stage, due to large amounts of unclear and sometimes contradicting information.
3. Organizational difficulties and lack of cooperation: failures which are derived from the structural complexity of organizations, as well

as inter- and intra-organizational competitiveness, affect cooperation and lead to the ineffective and inefficient use of vital intelligence.

4. Intelligence-policy relationship: the relationship dynamics may cause estimates to be biased due to the innate desire to please the policy/decision-maker. In addition, the dysfunctional relationship between intelligence and policy may even prevent intelligence analysts from sending and receiving intelligence to and from decision-makers in order to prevent a conflict between the desired policy and the intelligence entities.
5. The literature focuses on the intelligence analysts' failures.

The business world adopted the intelligence practices derived from government intelligence and applied them to its needs after making adequate modifications. However, the lack of resources which are allocated to fulfill competitive intelligence needs in corporations makes its scope more limited, and therefore, leads to a smaller number of issues (called Key Intelligence Topics – KITs) and the processing of less information. However, from its very beginning, competitive intelligence was not limited to only tracking threats from competitors or monitoring significant technological developments (such as digital media replacing the DVD and CD, laser printer replacing the ink-jet printer, digital photography replacing chemical film and plastics replacing metals and glass, etc.). It also studied trends in markets with an emphasis on understanding customers' desires in order to support decisions leading to competitive advantage (Herring, 1999). Competitive intelligence and market intelligence are actually complimentary: while competitive intelligence usually monitors broad perspectives of the external environment that may have an impact on corporations, market intelligence is focused on current situation in the markets (Dishman and Calof, 2008; Barnea, 2014). It is important to emphasize that usually competitive intelligence has a broader perspective, with a deeper view of the future, whereas marketing intelligence is focused more on the current status of the competition in the marketplace (Dishman and Calof, 2008).

One notable similarity between government and competitive intelligence is the ongoing attempt to make decision-makers acquire the most out of the intelligence products presented to them. There is a difficulty in monitoring frequently changes in the two areas of business and state security because it is quite difficult to assess the significance of signals and noises as they arrive and to predict the future, and thus reduce uncertainty (Rafii and Kampas, 2002).

Another similarity is that in both areas, intelligence is being proactive and strives to obtain information, which can alert on changes that occur in the external environment and their significances (Prescott, 1999). In both domains, the intelligence presented to decision-makers can be very often a catalyst for

further actions and new initiative to secure advantages (Johansson, Roos and Kirchgeorg, 2010).

Moreover, competitive intelligence and government intelligence usually deal simultaneously with both tactical and strategic areas to address different needs and requirements by intelligence consumers. However, the senior decision-makers tend to seek primarily strategic intelligence (Herring, 1990; Bernhardt, 2010). Often in competitive intelligence, they work closely with strategic planning units and marketing, while in government strategic intelligence, these units operate closely and often directly with the senior decision-makers (Søilen, 2015) aiming to influence and make their inputs recognized (Marrin, 2017).

Intelligence challenges in the business sector and government

In recent years, we have seen a growing recognition in the business field that competitive intelligence is becoming one of the core competencies required for the business decision-making process (Grant, 2005). Until the mid-1990s it was not clear that such a need for competitive intelligence existed. Old school business executives attained their positions in the business world where competitive intelligence was not established and therefore, relied on unorganized information, "gut feelings" and personal experience (Watkins and Bazerman, 2003).

For many years, competitive intelligence professionals focused mainly on the tactical aspect: the immediate actions by competitors and other players, finding out their short-term intentions and identifying changes in the business environment. In recent years, nevertheless, there has been an increasing recognition of the comparative advantage of strategic competitive intelligence (Fleisher, Wright & Allard, 2008) to identify and thus assess what was happening around, know who you are fighting with (Atsmon, 2017), and contribute to the planning and preparations for the coming years (Prescott & Miller, 2001). As Søilen points out, while the competitive intelligence and market intelligence functions are obviously important, there are occasions when the top management is not using affectively the intelligence capabilities as a result of the lack of awareness. (Søilen, 2017)

Unlike government intelligence which obtains secret information from large and unique resources, competitive intelligence is very careful to function under the law, and its value to business success gets a greater degree of recognition (Bulley, Baku and Allan, 2014). Its activity is based on gathering in leaner scope, mainly from public information (known as Open - Source Intelligence – OSINT), but it is still capable of achieving high-quality results by helping to create a valid intelligence picture of the dynamics of the external environment (Fuld, 2007). At the same time, competitive intelligence is evolving as the needs of businesses

change, the methodology and technological supporting tools of gathering and analyzing information becoming better and forcing this ongoing evolution of intelligence (McGonagle and Misner-Elias, 2016; Ming-Jer-Chen, 2017; Bulger, 2016). Thus, what really matters more than the type and quantity of the data is establishing a deep corporate culture of evidence-based decision making. According to O'Connell and Frick (2013) it also means encouraging everyone in the organization to use data more effectively.

Competitive and market intelligence were pioneers in developing significant capabilities in monitoring social media and using the insights obtained as an additional tool in the decision-making process (Fleisher et al. 2008; Laasko, 2016). Real time social media information, together with traditional market and competitive intelligence provide detailed pictures of the competitive landscape and allow a comprehensive story than neither can deliver alone. Big Data accelerates these capabilities. This formula was recently presented by the leading business consulting firm, McKinsey. In this important article (Harrysson, Metayer and Sarrazin, 2012), the authors stated that the business world had developed advanced analytical tools for obtaining vast business information extracted from social media in addition to "conventional" sources. Government intelligence also gives increased weight to OSINT, revealed as important and qualitative, that can hardly be ignored. If in the past, one could argue that national strategic intelligence was relying primarily on secret information, it is changing fast. OSINT is becoming highly significant and relevant, while we are living in an age of growing transparency (Larkin, 2016; Ballasy, 2015). In recent years, social media has become a significant source for intelligence in government (Pascovich, 2013; Wheaton and Richey, 2014), while competitive and marketing intelligence has already used it for more than ten years (Degerstedt, 2015).

With the fast development of the Internet, the information revolution and more recently, the fast growth of social media, the business world has become much more transparent than in the past. Difficulties in collecting important information have declined gradually but the main problem remains in how to deal with vast amounts of information. The utmost challenge is the development of analytical capabilities that can benefit from the information collected. A new development is of social competitive intelligence, meaning competitive intelligence is better performed in a networking organization supporting the analytical process (Degerstedt, 2015).

As previously hinted, the United States Intelligence Community (USIC) is gradually granting higher priority to the value of OSINT. Since the 'Arab Spring', we have witnessed particularly the need to understand trends, preferences and perceptions among wider audiences through OSINT. This is something that the business world is already well-experienced in as a result of research and marketing intelligence that monitor massive crowds of customers. Other Western intelligence communities including Israel (Pascovich, 2013) follow

similar direction drawing similar lessons from the 'Arab Spring'.

Moreover, in the business world, one of the most useful sources of information, mainly qualitative collection, is through employees themselves. Since many of them have their own network and contacts with parties outside their company as part of their duties, they are exposed to important information on the competitive environment that can help to achieve a competitive advantage. This requires competitive intelligence professionals to build internal networks in the shape of informal relationship with relevant employees and brief them on key intelligence topics (KITs) such as changes in the competitive landscape, new moves by competitors, new technologies and innovation initiatives that come to their attention. Note that business firms are strict on keeping their activities legal and by codes of ethics and are careful to act in this way. In recent years, with the rapid development of OSINT and particularly social media, many companies have maintained contacts with their employees by using internal social media systems and other applications to share useful competitive information timely (Mayeh, Scheepers and Valos, 2012). Senior executives and managers are longing to be in a strong competitive position actively supported by intelligence capability, as Cisco's CEO John Chambers said: "We understand the market, our competitors and - most importantly - how our competitors think… I have a pretty good idea what their next two moves will be." (Swartz, 2013).

Intelligence failures in national intelligence

In both government and business there are real anticipations that the intelligence will deliver a timely warning on threats. But there still many setbacks thus it is important to examine one of the most important issues in intelligence, intelligence failures. One of the definitions of intelligence failure is taken from the CIA (CIA, 2008) as follows: "Systemic organizational surprise resulting from incorrect, missing, discarded, or inadequate hypotheses." According to another definition, intelligence failure is "organizational surprise resulting from incorrect information, a lack of information, from neglect or inadequate hypotheses." (Johnston, 2005). Intelligence failures often involve the late detection of a significant threat that gives a substantial advantage to the initiator side resulting in significant damage to the other side (Bar-Joseph and McDermott, 2017, pp 13-17). Examining the failures and the reasons for their occurrence leads to the conclusion that in many cases, it was possible to prevent them (Pillar, 2012; Travers, 2008). The reasons for failures usually do not arise from a lack of information but rather the human factor, i.e.: a lack of understanding the meanings of available information and poor evaluation of new and unfamiliar threats (Bar-Joseph and McDermott, 2017). The result is a wrong representation of the threat's meaning, organizational failures and difficulties in the application of the 'intelligence culture' (Davis, 2004, Mouton, 2002). Too often this is also a result of the diffusion of political considerations into intelligence assessments, i.e.

Politicization of intelligence (Maoz, 2006), and could be seen in the "Report on the U.S Intelligence Community's Prewar Intelligence Assessment on Iraq", from 2004 (Travers, 2004). However, when heads of states are refraining from intelligence warning, it is not considered an intelligence failure by the intelligence organization but a policy and decision making failures (Jensen, 2012).

One of the leading Israeli scholars within the field of military and security strategy, Yehoshafat Harkabi, emphasized that the lack of threat's distinction is a result of cognitive failures causing difficulties to produce a realistic picture (Harkabi, 1971). After failures of strategic intelligence at the national level, usually governments conduct a comprehensive examination into the causes of failures to avoid them in the future, and expose their results to the public (The 9/11 Commission Report, 2004). Expectations of improving the quality of intelligence with the increase of resources and tools in recent years did not materialize, and intelligence capabilities of the American, British and Israeli intelligence did not show significant improvements while the reasons for these failures remained the same (Betts, 2002; Betts 1978).

Nevertheless, in government intelligence, information sharing is one of the most problematic issues and an important lesson learned from the Inquiry Commission into the 9/11 terrorist attack. Its implementation has difficulties and has had internal opposition due to a disproportionate amount of secrecy and compartmentalization, resulting from limited vision and fixation of thought (Treverton, 2009). In the opinion of the 9/11 Inquiry Commission, this was one of the major faults that caused the failure of the intelligence that could prevent the terrorist attacks of 9/11 (The 9/11 Commission Report, 2004). We have also seen this problem in the intelligence failure to prevent the terrorist attack in the Boston Marathon in April 2013 (Giuliano, 2014).

As a result, following the 9/11 attacks and the subsequent failure to properly assess Iraq's Weapons of Mass Destruction program in 2003, two intelligence failures exhibiting two completely different types of errors, (Betts, 2007) official investigations were conducted to determine their underlying causes. Unfortunately, no consideration was given to look at inputs from the analytical models used in the business sector. No serious consideration was given to explore outside of the box of already known analytical practices used by the business community and academia.

Intelligence Failures and Lessons Learnt from the Business Field

As previously stated, intelligence failures also occur in the business world; however, the definition is slightly different. Intelligence failure in business can be defined as a significant surprise caused by an erroneous assessment of the competitive environment (Tsitoura and Stephens, 2012). Unfortunately, a

comprehensive review processes and lessons learned from business failures are less common as corporations keep these lessons inside (Barnea, 2011). However, in recent years it has been acknowledged that some of the reasons behind business failures also lie in the lack of an appropriate intelligence process and difficulties of managers to identify changes in the business environment. This is precisely what happened to Nortel, once Canada's largest technology company and a world leader in telecommunication. In the late 1990s, Nortel senior management failed to acknowledge early-warning signals provided by its competitive intelligence unit regarding major changes in the competitive environment (Schoemaker, Day, and Snyder, 2012), which was one of the key factors led Nortel to its collapse (Calof, Mirabeau and Richards,2015). In 2009 Nortel filed for bankruptcy protection, the single biggest corporate failure in Canadian history.

Academic research in business failures does not often highlight failures of intelligence, but rather studies other causes, such as unsuitable products, inadequate pricing, slow reaction to the competition, wrong strategic moves, and personal management failures of executives (Coyene and Horn, 2009). In numerous cases, especially failures in large corporations, while the consequences of failures were high, the corporations could recover in a reasonable time and therefore, was lesser impact than similar consequences in government intelligence failures. Some of the most serious threats to companies might not even be perceived as such in time as a result of cognitive biases, which affected on avoiding the use of the intelligence reports (Stahl and Grigsby, 1992). Acceptable solutions for business failures such as replacing senior management and organizational changes do not address the lack of intelligence or deficient attention by the decision makers focusing accidentally in failures of preparation and poor performance. A compelling example is the business failure by Levi's (Olson, van Bever and Verry, 2008) and Nokia (Surowiecki, 2013), while senior executives in each of these world leaders misread the early-warning signals which they held. Around the world and also in Israel, it seems that the number of directors understanding that quality and timely intelligence is critical to business success is increasing and therefore, moves to implement the discipline of competitive and market intelligence into their organizations become common practice.

At the same time, conventional business thinking has recognized for some years now that competitive and market intelligence studies are rooted in the experience obtained from the national intelligence (Kelley, 1968) in several fields:

1. Implementation of 'the intelligence cycle' into the business intelligence process,
2. Focus the intelligence methodology in the firm around Key Intelligence Topics (KIT's),
3. Setting up closed interactions between intelligence units and decision-makers using intelligence indicators for warning of threats in the competitive environment. For example, intelligence indicators could include loss of market

share, difficulties with major customers, decreased interest in competitors by the senior management, ignoring new competitors, and lack of knowledge about competitors and trends of innovations. The challenge is to implement a new cross-organizational discipline, which often faced company-wide objections (Søilen, 2017). This challenge of building an internal culture of intelligence was the focal point in the paper by Arthur D. Little's consultancy: "The Art of Systematic Surveillance" about implementing competitive intelligence in organizations (Johansson, Roos, and Kirchgeorg, 2010).

While the U.S. intelligence community mistakenly thought that it could not learn from experience gained by business intelligence, the business world has vast and successful experience using marketing research and collecting public information to identify consumer preferences and analyze competitors' moves. The recent failure of the intelligence in predicting the events of the 'Arab Spring' was noted by deputy director of the DIA, David Shedd: "analysts failed to note signs that would have indicated to us, shown us, that there was a growing dissatisfaction ... in the general population. We missed that." (Dilanian, 2012). These events led the U.S. intelligence agencies to examine relevant business experiences, analyzing the positions of broad audiences (crowd sourcing) in conjunction with academia and many global companies, including Intel, HP, Dell, Google, Eli Lilly, Procter & Gamble and General Electric.

An additional field that allows American intelligence to learn from these business experiences is in forecasting markets (Betts, 2004), known as prediction markets. This extensive business experience allows us to estimate the directions and trends in the markets and get early warnings of possible significant changes (Yeh, 2006). Another area were intelligence communities in the US and Israel have looked recently towards is the experience acquired by the business sector in measuring performance and specifically, the value of information (Hendriks and Wooler, 2006; Hollister Hedley, 2005; Gilad and Orbach, 2012; Moore, Krizan, and Moore, 2005).

The interrelations between national intelligence and competitive intelligence. A case study[iii]

Zim Ltd. was a leading Israeli corporation in the shipping business, among the 10 largest in the global industry of marine containers. In 2009, Zim made a presentation to its bondholders, in preparation for a discussion about the possibility of deployment its debts. The presentation, showed the predicted

iii The content of this case study was previously presented in a paper published by the same author in Competitive Intelligence Magazine, Vol. 16, No. 3, July- September, 2013. This case study about Zim Ltd is based upon two sources: Sheva, 2009 and Zur, 2009. It is presented briefly, yet the aspects of the intelligence failure have been analyzed carefully, miscalculated decisions being given special consideration.

increase in the volume of maritime transport as well as the volume of investments in building new ships expected to be watered in the coming years. Because the shipbuilding industry has open access to all of its records, it was possible to see that the production rate of ships was growing faster than the projected rate of cargo. According to this presentation, the availability of marine transportation was expected to increase between 2000 to 2013 by three and a half times, from 4.9 million TEU (unit of measurement accepted in containers) by 2000 to 17.9 million TEU by 2013. There has been no increase of this magnitude in 13 years and thus there was a surplus of shipping capacity of containers. In fact, in 2008, the situation became worse due to a decrease in ship demands, which exacerbated the problem of overcapacity in shipping transport dramatically.

However, even without this decrease in the demand for shipping capacity, there was still an over capacity that resulted from building too many ships. If Zim could see the surplus capacity expected for sea transport, then why did it enter into a strategic plan of acquiring more ships and accumulate a significant debt, a plan that could compromise its very existence?

The 2004 annual report by Israel Corporation Ltd., Zim's parent company, had predicted the following based on intelligence reports: -"management of Zim ships mentioned that the supply growth rate is expected to be higher than the growth in demand for transport of containers, given the increase in new orders for ships under construction. Such growth could have a significant impact in the business of leading marine companies"-. If this situation was evident already in 2004 – too much supply of transport capacity and the same statement appeared in the management reviews, then the question remains why did Zim enter into a massive investment program in 2006 and 2007 and order new ships?

If a competitive intelligence analyst identifies expected surplus capacity in two or three years, the most logical thing to do is to advise the senior management to replace the fixed costs with variable costs and reducing debt. Meaning, it is not worth buying ships and equipment or to call long-term lease agreements - better to sell ships to shorten long-term leases and short-term contracts. In this way, when it was low season, one can easily reduce costs and return ships whose lease dates have expired. However, such tactics would hurt profitability in the short term, for a price of increasing the running costs for future flexibility and reducing risk. Second, no one wanted to be the one that contracts in a growing industry. Therefore, management tends to follow the trend of other companies. This was a familiar human weakness and also a cognitive bias: we prefer to be wrong with everyone than to be right alone. There is a lesson to be learned from this case: people working in the business world should avoid groupthink. The excess of current production capacity was a heavy burden on Zim's shoulders for four and five years since 2009, which later led it into bankruptcy.

But what are the lessons learned from the competitive intelligence aspects? Was it possible to avoid the catastrophic financial situation Zim reached in

2009 through the use of competitive intelligence analysis? The clear answer is yes. Competitive intelligence is also about identifying the big trends that will reshape the business environment and the drivers that disrupt the industry. Because various industries have available information, it is possible to forecast and predict based on reported number. This analysis will help identify which trends are of the highest impact, uncertainty and will allow scenario generation to better address and mitigate potential failures.

Intelligence tools we know from national strategic and business intelligence could have help the decision-makers at Zim. The use of Forecasting, Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis and OSINT (Table 1 column 2), was not enough to have a strong impact on the decision -makers, who ignored this analysis which later brought Zim to bankruptcy. Zim could have improved its intelligence performance by using tools acquired from the national intelligence discipline (Table 1, Column 3, in bold letters), like Early-Warning indicators; in order to know better about threats as a result of global changes in the international commerce – KITs - to improve focus on what was really important for Zim to know at that stage and Opportunity Analysis - which could have helped identify external opportunities and vulnerabilities that could have been exploited to advance a much more careful strategy at that time. (Rothwell, 2012). Only concise strategic intelligence efforts could give Zim's decision-makers the inconvenient truth of what's really going to happen to Zim's if it ignores the drivers of change in the competitive arena.

Table 1: Zim Ltd.: Using intelligence tools to improve the decision- making process

Areas of activity (1)	**Imported tools from competitive intelligence (2)**	**Imported tools from national intelligence (3) (*potential*)**
Analysis	SWOT	Early warning indicators
Gathering	OSINT	Key Intelligence Topics (KITs)
Management of uncertainties	Forecasting	Opportunity analysis

Conclusions

Intelligence failures by the U.S. intelligence community as well as other intelligence organizations in the last decade, including missing the prediction of the 'Arab Spring', led U.S., UK, and Israeli intelligence agencies to examine

the accuracy of relevant experiences in business analysis of large audiences, performing forecasting, using opportunity analysis techniques and also to measure the value of information, as is well-known in the business world.

It seems that national intelligence organizations have gradually started to comprehend the need to study other disciplines, including the business field including competitive intelligence, to see how they could enhance their abilities and to open up to the business sector and implement new capabilities that after making adjustments, could help to confront the challenges they are facing. An excellent example is how the FBI reinvented itself after 9/11 and reorganizes itself from a law enforcement agency to intelligence security agency as a result of a notable study by three notable scholars from Harvard headed by Jan Rivkin, using specialized academic capabilities in organizational design and organizational identity (Gulati, Raffaelli and Rivkin, 2016).

Those engaging in competitive and market intelligence constantly strive to reach the highest professional level recognized by national intelligence and see there the true model for information and intelligence management which are supporting the decision making process by governments. On the other hand, the author's belief is that by using the intelligence discipline it was possible to create early warnings before the burst of the 2008 financial crisis (Walton, 2012, Barnea, 2011), that could give timely early warning signals that could help to prevent this crisis which changed the economic history of the world. This is also true to many other strong corporations, which failed to see the changes coming by competitors and strategic market's moves, which left them with no likelihood to survive.

In both government and in business the intelligence discipline is a decision support system. The use of an intelligence approach is an important way of assisting chief executives in both fields in avoiding mistakes in the process of deciding what to do next. It leads to a more careful evaluation of alternatives and dimensions in a comprehensive way, thus overcoming many of the problems associated with biases in information processing, biases in group dynamics and in individually decision-making. In addition, intelligence analysis has the benefit of displaying all the information in a systematic way for key decision makers.

The author's belief is that it is necessary to build new bridges between national intelligence officials and executives in the business world, to discuss the mutual benefit from learning from each other. To overcome the issue of secrecy, which characterizes national intelligence, it has to be clarify in advance, that these discussions will be focused on methodology without breaching state secrets. This is a major challenge when trying to achieve mutual learning of intelligence. As could be seen in table 1, in Israel we have identified intelligence tools that could be imported from competitive intelligence to government intelligence and vise versa, from the national intelligence to competitive intelligence. We are in the initial stage of this kind of discussion, especially after national intelligence found the necessity to open itself, but it is not an easy process.

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